AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (Currently Amended) Method for controlling ~~system parameters, in particular for controlling the~~ a voltage applied to a piezoelectric ~~elements~~ element (10, 20, 30, 40, 50, 60) within a circuit (A) for charging and discharging the piezoelectric ~~elements~~ element (10, 20, 30, 40, 50, 60), ~~characterized by~~ comprising:

modifying ~~at least one control parameter for the control of a system parameter, in particular~~ a target voltage for the voltage applied to ~~a~~ the piezoelectric element (10, 20, 30, 40, 50, 60), in view of at least one systematic error occurring during a first control procedure of the ~~system parameter~~ voltage applied to the piezoelectric element to obtain a ~~corrected control parameter~~ a target voltage for a second and/or a further control of the ~~system parameter~~ voltage applied to the piezoelectric element.

2. (Currently Amended) The method of claim 1, ~~characterized in that~~ comprising:

a) a system parameter, in particular the voltage across a piezoelectric element (10, 20, 30, 40, 50 or 60), is modified according to a predefined target value, in particular a target voltage (U_{target});

b) the resulting value of the system parameter is measured by measuring means (600, 610; D, E);

c) the measured value is compared to the predefined target value by comparison means (D, E); and

d) a target value for a further modification of the system parameter is modified in consideration of detected differences between the measured value and the first predefined target value.

3. (Currently Amended) Method ~~as according to claim 1,~~ for controlling system parameters, in particular for controlling the voltage applied to piezoelectric elements (10, 20, 30, 40, 50, 60) within a circuit (A) for charging and discharging piezoelectric elements (10, 20, 30, 40, 50, 60), comprising modifying at least one

control parameter for the control of a system parameter, in particular a target voltage for the voltage applied to a piezoelectric element (10, 20, 30, 40, 50, 60), in view of at least one systematic error occurring during a first control procedure of the system parameter to obtain a corrected control parameter for a second and/or a further control of the system parameter;

~~characterized in that~~ wherein

a1) the system parameter is modified in accordance with at least one control parameter corresponding to a target value;

a2) the modification of the system parameter is performed in a plurality of discrete steps;

a3) the modification procedure is controlled by means of measuring and comparing any obtained value of the system parameter to the target value by measuring means and comparison means, respectively;

a4) the modification procedure is terminated as soon as the obtained value equals the target value by terminating means (E);

b. the obtained value of the system parameter is re-measured after the modification procedure is terminated by measuring means (D, E; 600, 610); and

c. the re-measured value of the system parameter is compared as resulting system parameter to the target value by comparison means (D, E).

4. (Currently Amended) Method ~~as according to claim 1,~~ for controlling system parameters, in particular for controlling the voltage applied to piezoelectric elements (10, 20, 30, 40, 50, 60) within a circuit (A) for charging and discharging piezoelectric elements (10, 20, 30, 40, 50, 60), comprising modifying at least one control parameter for the control of a system parameter, in particular a target voltage for the voltage applied to a piezoelectric element (10, 20, 30, 40, 50, 60), in view of at least one systematic error occurring during a first control procedure of the system parameter to obtain a corrected control parameter for a second and/or a further control of the system parameter;

~~characterized in that~~ wherein detected differences between the measured value and the target value are taken into consideration by means of adding an offset to any desired target value for a further modification procedure.

5. (Currently Amended) Method ~~as according to claim 1,~~ for controlling system parameters, in particular for controlling the voltage applied to piezoelectric elements (10, 20, 30, 40, 50, 60) within a circuit (A) for charging and discharging piezoelectric elements (10, 20, 30, 40, 50, 60), comprising modifying at least one control parameter for the control of a system parameter, in particular a target voltage for the voltage applied to a piezoelectric element (10, 20, 30, 40, 50, 60), in view of at least one systematic error occurring during a first control procedure of the system parameter to obtain a corrected control parameter for a second and/or a further control of the system parameter;

~~characterized in that~~ wherein the offset is calculated as the absolute or relative difference between the first target value and the corresponding obtained value as measured.

6. (Currently Amended) Method ~~as according to claim 1,~~ for controlling system parameters, in particular for controlling the voltage applied to piezoelectric elements (10, 20, 30, 40, 50, 60) within a circuit (A) for charging and discharging piezoelectric elements (10, 20, 30, 40, 50, 60), comprising modifying at least one control parameter for the control of a system parameter, in particular a target voltage for the voltage applied to a piezoelectric element (10, 20, 30, 40, 50, 60), in view of at least one systematic error occurring during a first control procedure of the system parameter to obtain a corrected control parameter for a second and/or a further control of the system parameter;

~~characterized in that~~ wherein the offset is a function of an averaged and filtered measured voltage ($<U_{actual}>$) of piezoelectric elements (10, 20, 30, 40, 50, 60) and an averaged and filtered target voltage ($<U_{target}>$,$<U_{offset,p}>$) for said piezoelectric elements (10, 20, 30, 40, 50, 60).

7. (Currently Amended) Method ~~as according to claim 1,~~ for controlling system parameters, in particular for controlling the voltage applied to piezoelectric elements (10, 20, 30, 40, 50, 60) within a circuit (A) for charging and discharging piezoelectric elements (10, 20, 30, 40, 50, 60), comprising modifying at least one control parameter for the control of a system parameter, in particular a target voltage for the voltage applied to a piezoelectric element (10, 20, 30, 40, 50, 60), in view of at least one systematic error occurring during a first control procedure of the system

parameter to obtain a corrected control parameter for a second and/or a further control of the system parameter;

~~characterized in that~~ wherein the averaged and filtered target voltage ($<U_{target}>$,$<U_{offset,p}>$) of piezoelectric elements (10, 20, 30, 40, 50, 60) is a function of an averaged and filtered voltage offset value ($<U_{offset,p}>$)and an averaged and filtered initial target voltage ($<U_{target}>$) for the piezoelectric elements (10, 20, 30, 40, 50, 60).

8. (Currently Amended) Method ~~as according to claim 1,~~ for controlling system parameters, in particular for controlling the voltage applied to piezoelectric elements (10, 20, 30, 40, 50, 60) within a circuit (A) for charging and discharging piezoelectric elements (10, 20, 30, 40, 50, 60), comprising modifying at least one control parameter for the control of a system parameter, in particular a target voltage for the voltage applied to a piezoelectric element (10, 20, 30, 40, 50, 60), in view of at least one systematic error occurring during a first control procedure of the system parameter to obtain a corrected control parameter for a second and/or a further control of the system parameter;

~~characterized in that~~ wherein an offset is determined for each of top-closed position, up-open position and down-open position of the piezoelectric elements (10, 20, 30, 40, 50 and 60).

9. (Currently Amended) Method ~~as according to claim 1,~~ for controlling system parameters, in particular for controlling the voltage applied to piezoelectric elements (10, 20, 30, 40, 50, 60) within a circuit (A) for charging and discharging piezoelectric elements (10, 20, 30, 40, 50, 60), comprising modifying at least one control parameter for the control of a system parameter, in particular a target voltage for the voltage applied to a piezoelectric element (10, 20, 30, 40, 50, 60), in view of at least one systematic error occurring during a first control procedure of the system parameter to obtain a corrected control parameter for a second and/or a further control of the system parameter;

~~characterized in that~~ wherein an offset is stored as long as a corresponding position of the piezoelectric elements (10, 20, 30, 40, 50 and 60) is not used.

10. (Currently Amended) Apparatus, ~~characterized in that~~ comprising:

a) modification means (A, E, D) for the modification of system parameters according to at least one control parameter;

b) measuring means(E, D; 600, 610) for the measurement of the value of the resulting system parameter;

c) comparison means (E, D) for the comparison of the measured value to a predefined target value; and

d) calculation means (D) for the calculation of at least one control parameter for a further modification of the system parameter in accordance with differences occurring between the measured value and the target value are implemented within the apparatus.

B1 Cont'd.

11. (New) Method for controlling a voltage applied to a piezoelectric element within a circuit for charging and discharging the piezoelectric element, comprising:

modifying a target voltage for the voltage applied to the piezoelectric element in view of a deviation of the voltage applied to a piezoelectric element from a target voltage occurring during a first control procedure to obtain the target voltage for a second and/or a further control of the voltage applied to the piezoelectric element.